Application Serial No.: 10/619,739

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (original): A DNA molecule comprising the following elements in a 5' to 3' direction:

a first restriction endonuclease site,

a T3 promoter site;

at least one Tag gene, said Tag gene comprising at least 5 20 mer Tag sequences;

a Poly A site having at least 21 consecutive A residues, wherein said A residues are on the same strand as said T3 promoter such that when transcription is initiated at the T3 promoter, a Tag RNA transcript is produced having a poly A tail.

a second restriction endonuclease site which may be the same or different than said first restriction endonuclease site;

a T7 Promoter on the opposite strand as said T3 promoter.

Claim 2 (original): A DNA molecule according to claim 1 wherein said Tag sequences are selected from Seq. Id. Nos. 1-2050 or their complement.

Claim 3 (currently amended): A DNA molecule according to claim 1 wherein said Tag gene is selected from the group consisting of Tags A, B, C, D, E, F, G, H, I, J, N, O, Q, Tag IN, Tag IQ and Tag IQ.EX SEQ ID NOs. 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2059, 2060, 2061, 2062, 2063, 2064, 2065 and 2066.

Claim 4 (currently amended): A DNA molecule according to claim 1 wherein, said first restriction endonuclease site is SphI (gcatgc), said T3 promoter comprises the following sequence attaaccetcactaaagg SEQ ID NO. 2067; said Tag gene is selected from the group consisting of Tags A, B, C, D, E, F, G, H, I, J, N, O, Q, Tag IN, Tag IQ and Tag IQ.EX SEQ ID NOs. 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2059, 2060, 2061, 2062, 2063, 2064, 2065 and 2066. IS; said second endonuclease site comprises a PstI site (ctgcag); and said T7 promoter comprises tatagtgagtegtatta SEQ ID NO. 2068.

Claim 9 (currently amended): A DNA molecule according to claim 1 comprising the sequence, wherein capitalized bases refer to Tag gene sequence: SEQ ID NO. 2055

geatgeaattaacceteactaaagggacgegtacgtaagettggatectctagaCCATCCGATTAAATACCGTGGATT

ACGTTAAGTTACGGCGGTTGACTTAGTTATGCGAGGTTCGCTTACGTTGCATAGCGG

ATCGCTTAACCTCTATGCGTACAGCTTACCTACTATGCGTGCAAGTTACCGAGCTGA

CGTCGCGTTAGACAGCTCATTCGTCACGTTTAGGACTATGTCGAAGCGTTTCGACCA

Claim 10 (currently amended): A DNA molecule according to claim 1 comprising the sequence, wherein capitalized bases refer to Tag gene sequence: SEQ ID NO. 2056 geatgea attaacecte a ctaa agggae gegtae gtaa gett ggateete taga ACGCGGTCACTCAGCATATAGTC**GTTGCACCTAGTTGATAGTCGCCGATTCTAGTTATGGCGTCGGATTAGACCGGATCA** CCCGGACATGGACGTTAAGTATCCGGCCTGGACGACAATAATTCGGCGGTGCCTCA **CAATATTCCGAGAACTCTGCATCAATTCGGGCTAGTCGTACCTGAACGGGCATCAGT CGAATCTCTTCGTGGCTAGTCTGTGACGTCCGTGGTTCATCGTGTCACCACGCGGTA** <u>CATGAGTCAAAGTCCGAATAGCTCGCGCAACGTCCGTCTAGCTGGATCAACCTATCC</u> **CTGAGTCTATATGCGTACCAATGGATGCGGTCTCCTCCGACTGAGTATGCGTTCCTC GGACTGGATCAGCTATCCACGAGCTGTAATCCGGTACTAGGGTGTATCGCCTGTTAC TAGGTTAGACAGTCGTGTACTCGGTTAGACTGATGGTCAACGACCTATACTGACAGC** ATACGAGACGTGACGACTGCATAGTGGTCGGTCTGACACATCTCCTCGTTGGTAGTA **CGTGCCCGTATGGATAGGGCTCTAGCCCGCTATGGTGAGTCTAATCGCCGTTGGTC** TGTATGCAGTGCGGTATGGTTCCTCTCAGTCACGTATGGTTCGCTGCTGTCCGTCATG atta.

Claim 11 (currently amended): A DNA molecule according to claim 1 comprising the sequence; wherein capitalized bases refer to Tag gene sequence: SEQ ID NO. 2057 geatgeaattaacceteactaaagggaegegtaegtaagettggateetetagaATGCAGCGTAGGTATCGACTCTCA CTGTGGAGTCGTCTATAGATGTCGTGGAGTCCTCAGAGTGCTGTAGGTCCTCATAG GTCGTGCTGTCTCTCACACGCGTGCGTGAGTCTACATTTCTGCGAGTTGGTGCTCTC

Claim 12 (currently amended): A DNA molecule according to claim 1 comprising the sequence, wherein capitalized bases refer to Tag gene sequence: SEQ ID NO. 2058 $\underline{geatgea attaacceteactaa agggae gegtae gtaagettggateetetaga GATATGCGTTACGTGAGTCTGATA}$ **GCAGTTCACTACCTGGATATCTGATCCACTAGCTCGATCATGCTCACCCATAGTTTAT** CTGCATCACTCGTACTGAAATGCTCACATCGCAGGTAGAGCAGCATCGTAGAGCGTC AAGCTGCATCCTAGCGTCATGAGTCATAGTACCTCATGCTCACGTGATCTACCCTAG CTGACCGCTAATGACGGCAGTGCAACCTGAGATACCGACGGCATACTGTCGTCAAC GTCAGGCAATGTGTCCGAACGGCGAGCTACGTCGCCTCACGGAGTAATCGCGTCCCT CTAGGTATAGTGCCGTCGGTTCAGGTCATATGTCGCGGGTTCTGCACATATCACGGA CGTATCGCTATCAGACGGACGCTCTCGGACCTAAACCGTAGCTCTCGGCAAGATCGT **CCTCGTCTCGAATATAGCGCCCTAGTGCTGCAAATGTCACCGCTATCTCGTAAGGGG TCCGTCTGTTGAGTTAGGCCTCCTCTCGTTGGATGTGAGCTCGGTTGCTTGGATGGTG** <u>CAGCTTACTTCGCGTACCTGCTGTTTGCATCAGTCCTCTGCATCTATAATCGCGTATC</u> **TCTCTCTAGTAGACCATATAGCCATCTAAGCGCTCGATATTCCACCTAAGTGGCGCC** TATTGAACTAAGTGGCAGCCGAATGGACTATCGCTCCTCGATATGTACGGATAGGCC ACGGCATGTACGAGCATAAGCCGAACTGCACGAGCATACCCGACACTGATCTGAGA

Claim 13 (currently amended): A DNA molecule according to claim 1 comprising the sequence, wherein capitalized bases refer to Tag gene sequence: SEQ ID NO. 2059

 $\underline{gcatgcaattaaccctcactaaagggacgcgtacgtaagcttggatcctctagaGATAAGCGTTCACAGCTCGGCAA}$ TACCTGTGACGAGCTGCTCGCAAGATTTACGCAGTGTGGCTATACTTGACAGTGATG **GCGCTTACTTCAGATGTATGGGTGATACTTCGCTATATGGGTGGTCACTTCTCTATGG CGCGTGACAATGTACTATGGAGCGGTCAATGTCAGTACGGATCGCGTCGATCTAGGT** GACTACGCACGCCTCTGGAGTAAATCGARWGCTCCGTGCGAAATACGCGGTCATCG **TGCGAATAACCGAGTCATCGTGAGTAGTATGAACGTGTCGTGTTATGCAGCGGTATG** TCGTGCTATAATGGCGTCTGTCGTGCTCATAAGGTTCCTCTGATGTGCTAGACGTGTC <u>CATCGAGCTGCATAGCTATACTTCGAGTCACTTGGGATACTTCGATAGCGTTGTGAA</u> **TAGTGTCGTAGGCTCTCGGGCACGTTGYTAAACTGTTGCCGCCAATTCAAGATTAGT CCAGCTCGTACTATCGAATACACCATCGTCGTATCGAATAATCGCACCTCGTAGGAG** TCAGTTGCCACTCGTTGATAGTCAACCAAGCTCGTTAGATAGTAGCCCAGATCCTAC GAGATGAGCTACGTAACTACAGTGATAGCATATAGGGTACGCTAGAATGCCAGGTC GTAGTCGAATTAGTCAGGTTGGATGTCTACTAGTTGACTTGGAGTATGCCATGAAGA **CTCGTCCCTCGATATCAATACTCGTCCGCAGGTGAACACTGTAGTCGGTGCTAGTGC** <u>CACTAATYGTCTGCGGTGGCTACTAATGGTTACGGTGCCTGACTAATCGTGTAGGTG</u> TCTAATACATCGTGATACGGGCGATATAATGCTCGATACGGCAAATATAGCTCCGTC

Claim 15 (currently amended): A DNA molecule according to claim 1 comprising the sequence, wherein capitalized bases refer to Tag gene sequence: SEQ ID NO. 2061 $\underline{geatgea attaacceteactaaagggaegegtaegtaagettggateetetagaAGATCGCAGGGTATCGCATCGAC}$ AGACCTGGTATCGTCGTGACGAACGTGCTACTCGCTTATCGGGCCTGCTACATCAGT GGCGATGTTCGTAACCCTTAGCCGATCTTCTTACTTACGAGGCTACTATTCGATCAA ACTCGCCTATCTGGTAATAACTGCGGTGATCTGGTAGCCACTACGTGCGCCTGGTAG <u>CAAATACGGCGAGCTGGTATCACTATCGGCTCAGTGGTCCGACATAGTGCCCAGTGG</u> TTCGCATAACTGCCGCTGGGTCCAATATAACACGCAGTCGTCAATCATACGAGCCGA TGGTCAGCAATAGCGCCTGTGGTGACACTATGCCACCTCTGGTCTAATATAGCGCCC TGTGGTCGTATAATCGAGCGCGTAATCGTATATYCGACTGTAGGTGCGTAACTCGCG **ACTAGGTGGCTCTAATCTGCGTTGGTTGTCGCTCACAGTGTCTGGTGTTCGATACCCG** GATCGGGTTCCGTAATCTTGGCATCGAGGTTTCGTACATGTCACGCGGTCTCGTTCAT TCTCGGTGGTGCTCAGTACATCCAGTGGTGAGTCGCTACATCACACGGTGATCCGGC TAAACCTCTGGGCATCCGTATTAAGCGACATTCCTACGACTTATCAGCACGTCCTAC GGTATAACAAGGCGTGCTACGGTCTAACGACGCTGGTAGCAGTCTATCAGATCGCTA GTACGAGTTAGAGATGCTTAGTACGCCTTCGAATCTATGATGCTCGTGCTCACGCGA

Claim 16 (currently amended): A DNA molecule according to claim 1 comprising the sequence, wherein capitalized bases refer to Tag gene sequence: SEQ ID NO. 2062 CGCAGTGTCTGTACCAATACTCTGGTGGAGCTATATAAGCCGCTGTTGCGTAAATCA ACGCATGATCCCTATGACCGCGTCATGCTAACTGATACACGCTGCTCGAACAGTGA <u>TACGCACACTGATAACTATGCGCAGACGCTTGAAAACGATGTGACATCGCTTCTAGAG</u> <u>TATGAGCCGCAATGCACGACTGATACTCGATATGAGCAGCAGTCGGCTATGATTTGC</u> AATGCTTGCAGTATGTATCCTGATCGTGCGTGCGATGTCTGATAATACGCTCGCATG ATATGTATTGCGCTCAGATGCTGGAGATATGCCATGCGTGCTGTCAGTATGCCATGT ATGCTGATATGTCGCGATCTATGTGGTGACTATGAGATCCATGTGATGACGTTGCAG TCTCTGTGACCTTATCGACGCGCATGTGAGCCTATAGACAGCGATGTGAGCACTCTC ATCTGCGGATCAGTCTATCCTCGCTGATGCTCAGTGATACACGCTGATGCACGTAGT GAGCATCCTGTGCTCGCATATACCGCTGCTGCACTGATATGAGCCAGTGCTGCTGCT CTCTACGGAGTGTGCTCGGCTATAACAGCGAGTGCTACGCCTAAACTGGCTGTCTAG **CACTGTAGCTGGTGCATGTACTCGACTGCCGCTGCATCTACTATAAGACTCTGACAT** TAGCGTATAGGCTGATACATTAGCTCGGATGCTATCAGCTTGCGCCTATTATATGCC TGACGCGGGATCTATCAGAACGACTCGGTAGCTCATATACTGGATCACGGTGCCACA ACATGCTACACGAGGTCTCAGACTCTATCCCGTGGACTCAACGTGCATCTGCTATGC TGAGCGCGTATCTGTGTACCTGTCCGATGCTCTGATCTACACTGCCGTGATCGTTATA TGACGAGACTGTGCGCTCATAGCCGACACTGTGCTCGATAAGACCACGCTGTGCGG

Claim 17 (currently amended): A DNA molecule according to claim 1 comprising the sequence, wherein capitalized bases refer to Tag gene sequence: SEQ ID NO. 2063

geatgea attaa ee etea aagggae gegtae gtaa gett ggateet et aga CTAGTGCATCCTCGTGGCATCATGCGTCTCCTCAGTAGGTCTGCGACTGATCCTAGTGCAATGCGTCTGAGCCTGAGCTAC AGCGATATAGCCTGGATTGTGAGCGTATTTGCTGTCAGAACCTCAGCTCATCATGTA TGATGCTGTACCATCCTGCGATACTGAAGATGCACCGCTATAATGCGAGGCTCTCCG CTAAAGTGGAAGCTGCTCGTTCTCAATGCGAGCGAGTCGAATCCAATGCCGTAGCTG **CGATAACGATGCCGCTGACTCTACGGTAATGCACGATCCTCTACATTGATAGCAGAT** AGTCTAACGGGATAGCATAGGTGCAAGGCTCCTAGCATGTAGTCACAGGTGCTCAG ATATAGTCATCGCTGCAATCAGCTAGTCATCTTGTCAGGATGCTACTCACTGCGTGC AGAAGATTCGCACGACTTCAGAGGATGGCACTCGTCATTAGAGTGATGTTCTCGGAT CGACACTGCTGGTCTGCGAATGACTCGCATTCACTAACATGGAGCATCGTTATCTAA AGGGATGCACGTTATCGTCGAGTGCCGTCATGTCTATGCAGTGCGGCCTATGTCT <u>CATTAGCGAGTCGTATGTATCATGTCGGGCTCGAATGTTGCACACGTCTGCGTAATG</u> GTGACCGCTAGTCCCASATGGTGCTTCGTAGCCACAAATGTCGTTAGGTAGACCGAC **GTTATCGCGCTATACCCGATGTCAACGCGAGTTAGACCGTATCGTCCCCAGTGCCCT** AAGATGGTCAAGCGTGCTCCTACGTTAGTATCAGTTTCCCTATTGGTACGTCTGGCG **TACTTCTGAAACGTGATGGGCGGCTGGTTACCCGTATATGGGCTCGGTTGACCTCTA TTGGGCGTTGTTGACCCGAATTCGGTATCCTCGTCGTTAAATGGCGAACGTCGTCTG** CTATAGGCAAACGTCTGTCGGTCATGGCAAATGTTACTCGTGTGTGCAAGAAATTAC

GTACTATCGAATACACCATCGTCGTATCGAATAATCGCACCTCGTAGGAGTCAGTTG CCACTCGTTGATAGTCAACCAAGCTCGTTAGATAGTAGCCCAGATCCTACGAGATGA GCTACGTAACTACAGTGATAGCATATAGGGTACGCTAGAATGCCAGGTCGTAGTCG AATTAGTCAGGTTGGATGTCTACTAGTTGACTTGGAGTATGCCATGAAGACTCGTCC CTCGATATCAATACTCGTCCGCAGGTGAACACTGTAGTCGGTGCTAGTGCCCACTTC **TTGTCTGCGGTGGCTACTAATGGTTACGGTGCCTGACTAATCGTGTAGGTGTCTAAT** ATCCAGATCGCAGGGTATCGCATCGACAGACCTGGTATCGTCGTGACGAACGTGCTA CTCGCTTATCGGGCCTGCTACATCAGTGGCGATGTTCGTAACCCTTAGCCGATCTTCT TACTTACGAGGCTACTATTCGATCAAACTCGCCTATCTGGTAATAACTGCGGTGATC TGGTAGCCACTACGTGCGCCTGGTAGCAAATACGGCGAGCTGGTATCACTATCGGCT <u>CAGTGGTCCGACATAGTGCCCAGTGGTTCGCATAACTGCCGCTGGGTCCAATATAAC</u> ACGCAGTCGTCAATCATACGAGCCGATGGTCAGCAATAGCGCCTGTGGTGACACTAT GCCACCTCTGGTCTAATATAGCGCCCTGTGGTCGTATAATCGAGCGCGTAATCGTAT CTCACAGTGTCTGGTGTTCGATACCCGGATCGGGTTCCGTAATCTTGGCATCGAGGT **TTCGTACATGTCACGCGGTCTCGTTCATTCTCGGTGGTGCTCAGTACATCCAGTGGTG** AGTCGCTACATCACACGGTGATCCGGCTAAACCTCTGGGCATCCGTATTAAGCGACA **TTCCTACGACTTATCAGCACGTCCTACGGTATAACAAGGCGTGCTACGGTCTAACGA** CGCTGGTAGCAGTCTATCAGATCGCTAGTACGAGTTAGAGATGCTTAGTACGCCTTC <u>GAATCTATGATGCTCGTGCTCACGCGATGCACTCGGATTATGGCACATGCACTCGCG</u> <u>TAATGACGCTGCATCGCTCAGTATGATCCATGAGCGCCGTGAATGACGCATGAGCCT</u> **CGTATCGAGTGCATGAGCTGTCTTTCACATGATACATCGCTCTAAATCATCATGCGA** <u>CAGTCTCGACAGCAGCTCAGCATCTATGCATCATGTGCCTCACTAGGACATCATGCT</u> <u>CGACTCTGAGACACTGATCGAGCATTAAGACtetagageggeegeegaetagtgagetegtegaeeeeggg</u>

Claim 19 (currently amended): A DNA molecule according to claim 1 comprising the sequence, wherein capitalized bases refer to Tag gene sequence: SEQ ID NO. 2065

geatgeaattaacceteactaaagggaegegtaegtaagettGATAAGCGTTCACAGCTCGGCAATACCTGTG ACGAGCTGCTCGCAAGATTTACGCAGTGTGGCTATACTTGACAGTGATGGCGCTTAC TTCAGATGTATGGGTGATACTTCGCTATATGGGTGGTCACTTCTCTATGGCGCGTGA CAATGTACTATGGAGCGGTCAATGTCAGTACGGATCGCGTCGATCTAGGTGACTACG CACGCCTCTGGAGTAAATCGAGTGCTCCGTGCGAAATACGCGGTCATCGTGCGAATA ACCGAGTCATCGTGAGTAGTATGAACGTGTCGTGTTATGCAGCGGTATGTCGTGCTA **TAATGGCGTCTGTCGTCCTCATAAGGTTCCTCTGATGTGCTAGACGTGTCCATCGAG CTGCATAGCTATACTTCGAGTCACTTGGGATACTTCGATAGCGTTGTGAATAGTGTC** GTAGGCTCTCGGGCACGTTGTTAAACTGTTGCCGCCAATTCAAGATTAGTCCAGCTC GTACTATCGAATACACCATCGTCGTATCGAATAATCGCACCTCGTAGGAGTCAGTTG **CCACTCGTTGATAGTCAACCAAGCTCGTTAGATAGTAGCCCAGATCCTACGAGATGA** GCTACGTAACTACAGTGATAGCATATAGGGTACGCTAGAATGCCAGGTCGTAGTCG AATTAGTCAGGTTGGATGTCTACTAGTTGACTTGGAGTATGCCATGAAGACTCGTCC CTCGATATCAATACTCGTCCGCAGGTGAACACTGTAGTCGGTGCTAGTGCCCACTTC TTGTCTGCGGTGGCTACTAATGGTTACGGTGCCTGACTAATCGTGTAGGTGTCTAAT ATCCAGATCGCAGGGTATCGCATCGACAGACCTGGTATCGTCGTGACGAACGTGCTA CTCGCTTATCGGGCCTGCTACATCAGTGGCGATGTTCGTAACCCTTAGCCGATCTTCT **TACTTACGAGGCTACTATTCGATCAAACTCGCCTATCTGGTAATAACTGCGGTGATC** TGGTAGCCACTACGTGCGCCTGGTAGCAAATACGGCGAGCTGGTATCACTATCGGCT CAGTGGTCCGACATAGTGCCCAGTGGTTCGCATAACTGCCGCTGGGTCCAATATAAC ACGCAGTCGTCAATCATACGAGCCGATGGTCAGCAATAGCGCCTGTGGTGACACTAT GCCACCTCTGGTCTAATATAGCGCCCTGTGGTCGTATAATCGAGCGCGTAATCGTAT CTCACAGTGTCTGGTGTTCGATACCCGGATCGGGTTCCGTAATCTTGGCATCGAGGT TTCGTACATGTCACGCGGTCTCGTTCATTCTCGGTGGTGCTCAGTACATCCAGTGGTG AGTCGCTACATCACACGGTGATCCGGCTAAACCTCTGGGCATCCGTATTAAGCGACA TTCCTACGACTTATCAGCACGTCCTACGGTATAACAAGGCGTGCTACGGTCTAACGA CGCTGGTAGCAGTCTATCAGATCGCTAGTACGAGTTAGAGATGCTTAGTACGCCTTC GAATCTATGATGCTCGTGCTCACGCGATGCACTCGGATTATGGCACATGCACTCGCG

TAATGACGCTGCATCGCTCAGTATGATCCATGAGCGCCGTGAATGACGCATGAGCCT CGTATCGAGTGCATGAGCTGTCTTTCACATGATACATCGCTCTAAATCATCATGCGA CAGTCTCGACAGCAGCTCAGCATCTATGCATCATGTGCCTCACTAGGACATCATGCT CGACTCTGAGACACTGATCGAGCATTAAGACTCTAGACTCTGTGCCATGATCGTGAG **TTGTCGCAGTGTCTGTACCAATACTCTGGTGGAGCTATATAAGCCGCTGTTGCGTAA** ATCAACGGCATGATCCCTATGACCGCGTCATGCTAACTGATACACGCTGCTCGAACA GTGATACGCACACTGATAACTATGCGCAGACGCTTGAAACGATGTGACATCGCTTCT AGAGTATGAGCCGCAATGCACGACTGATACTCGATATGAGCAGCAGTCGGCTATGA TTTGCAATGCTTGCAGTATGTATCCTGATCGTGCGTGCGATGTCTGATAATACGCTCG **CATGATATGTATTGCGCTCAGATGCTGGAGATATGCCATGCGTGCTGTCAGTATGCC** ATGTATGCTGATATGTCGCGATCTATGTGGTGACTATGAGATCCATGTGATGACGTT GCAGTCTCTGTGACCTTATCGACGCGCATGTGAGCCTATAGACAGCGATGTGAGCAC TCTCATCTGCGGATCAGTCTATCCTCGCTGATGCTCAGTGATACACGCTGATGCACG TAGTGAGCATCCTGTGCTCGCATATACCGCTGCTGCACTGATATGAGCCAGTGCTGC **TGCTCTACGGAGTGTGCTCGGCTATAACAGCGAGTGCTACGCCTAAACTGGCTGT** <u>CTAGCACTGTAGCTGGTGCATGTACTCGACTGCCGCTGCATCTACTATAAGACTCTG</u> ACATTAGCGTATAGGCTGATACATTAGCTCGGATGCTATCAGCTTGCGCCTATTATA TGCCTGACGCGGGATCTATCAGAACGACTCGGTAGCTCATATACTGGATCACGGTGC <u>CACAACATGCTACACGAGGTCTCAGACTCTATCCCGTGGACTCAACGTGCATCTGCT</u> ATGCTGAGCGCGTATCTGTGTACCTGTCCGATGCTCTGATCTACACTGCCGTGATCGT <u>TATATGACGAGACTGTGCGCTCATAGCCGACACTGTGCTCGATAAGACCACGCTGTG</u> CGGATATAGTCGACCTAGTGCATCCTCGTGGCATCATGCGTCTCCTCAGTAGGTCTG CGACTGATCCTAGTGCAATGCGTCTGAGCCTGAGCTACAGCGATATAGCCTGGATTG **TGAGCGTATTTGCTGTCAGAACCTCAGCTCATCATGTATGATGCTGTACCATCCTGC** GATACTGAAGATGCACCGCTATAATGCGAGGCTCTCCGCTAAAGTGGAAGCTGCTC GTTCTCAATGCGAGCGAGTCGAATCCAATGCCGTAGCTGCGATAACGATGCCGCTGA CTCTACGGTAATGCACGATCCTCTACATTGATAGCAGATAGTCTAACGGGATAGCAT AGGTGCAAGGCTCCTAGCATGTAGTCACAGGTGCTCAGATATAGTCATCGCTGCAAT CAGCTAGTCATCTTGTCAGGATGCTACTCACTGCGTGCAGAAGATTCGCACGACTTC AGAGGATGGCACTCGTCATTAGAGTGATGTTCTCGGATCGACACTGCTGGTCTGCGA ATGACTCGCATTCACTAACATGGAGCATCGTTATCTAAAGGGGATGCACGTTATCGT

Claim 20 (original): A DNA molecule according to claim 1 further comprising at least two additional restriction sites.

Claim 21 (currently amended): A DNA molecule according to claim 20 comprising the sequence wherein capitalized bases refer to Tag gene sequence: SEQ ID NO. 2066

TTGTCTGCGGTGCTACTAATGGTTACGGTGCCTGACTAATCGTGTAGGTGTCTAAT ATCCAGATCGCAGGGTATCGCATCGACAGACCTGGTATCGTCGTGACGAACGTGCTA **CTCGCTTATCGGGCCTGCTACATCAGTGGCGATGTTCGTAACCCTTAGCCGATCTTCT TACTTACGAGGCTACTATTCGATCAAACTCGCCTATCTGGTAATAACTGCGGTGATC** TGGTAGCCACTACGTGCGCCTGGTAGCAAATACGGCGAGCTGGTATCACTATCGGCT CAGTGGTCCGACATAGTGCCCAGTGGTTCGCATAACTGCCGCTGGGTCCAATATAAC ACGCAGTCGTCAATCATACGAGCCGATGGTCAGCAATAGCGCCTGTGGTGACACTAT GCCACCTCTGGTCTAATATAGCGCCCTGTGGTCGTATAATCGAGCGCGTAATCGTAT CTCACAGTGTCTGGTGTTCGATACCCGGATCGGGTTCCGTAATCTTGGCATCGAGGT TTCGTACATGTCACGCGGTCTCGTTCATTCTCGGTGGTGCTCAGTACATCCAGTGGTG AGTCGCTACACCACGGTGATCCGGCTAAACCTCTGGGCATCCGTATTAAGCGACA **TTCCTACGACTTATCAGCACGTCCTACGGTATAACAAGGCGTGCTACGGTCTAACGA CGCTGGTAGCAGTCTATCAGATCGCTAGTACGAGTTAGAGATGCTTAGTACGCCTTC** <u>GAATCTATGATGCTCGTGCTCACGCGATGCACTCGGATTATGGCACATGCACTCGCG</u> TAATGACGCTGCATCGCTCAGTATGATCCATGAGCGCCGTGAATGACGCATGAGCCT CGTATCGACTGCATGACCTGTCTTTCACATGATACATCGCTCTAAATCATCATGCGA <u>CAGTCTCGACAGCAGCTCAGCATCTATGCATCATGTGCCTCACTAGGACATCATGCT</u> CGACTCTGAGACACTGATCGAGCATTAAGACTCTAGACTCTGTGCCATGATCGTGAG **TTGTCGCAGTGTCTGTACCAATACTCTGGTGGAGCTATATAAGCCGCTGTTGCGTAA** ATCAACGGCATGATCCCTATGACCGCGTCATGCTAACTGATACACGCTGCTCGAACA **GTGATACGCACACTGATAACTATGCGCAGACGCTTGAAACGATGTGACATCGCTTCT** AGAGTATGAGCCGCAATGCACGACTGATACTCGATATGAGCAGCAGTCGGCTATGA TTTGCAATGCTTGCAGTATGTATCCTGATCGTGCGATGTCTGATAATACGCTCG CATGATATGTATTGCGCTCAGATGCTGGAGATATGCCATGCGTGCTGTCAGTATGCC ATGTATGCTGATATGTCGCGATCTATGTGGTGACTATGAGATCCATGTGATGACGTT GCAGTCTCTGTGACCTTATCGACGCGCATGTGAGCCTATAGACAGCGATGTGAGCAC TCTCATCTGCGGATCAGTCTATCCTCGCTGATGCTCAGTGATACACGCTGATGCACG **TAGTGAGCATCCTGTGCTCGCATATACCGCTGCTGCACTGATATGAGCCAGTGCTGC** TGCTCTCTACGGAGTGTGCTCGGCTATAACAGCGAGTGCTACGCCTAAACTGGCTGT

<u>CTAGAACTGTAGCTGGTGCATGTACTCGACTGCCGCTGCATCTACTATAAGACTCTG</u> ACATTAGCGTATAGGCTGATACATTAGCTCGGATGCTATCAGCTTGCGCCTATTATA TGCCTGACGCGGATCTATCAGAACGACTCGGTAGCTCATATACTGGATCACGGTGC <u>CACAACATGCTACACGAGGTCTCAGACTCTATCCCGTGGACTCAACGTGCATCTGCT</u> ATGCTGAGCGCGTATCTGTACCTGTCCGATGCTCTGATCTACACTGCCGTGATCGT **TATATGACGAGACTGTGCGCTCATAGCCGACACTGTGCTCGATAAGACCACGCTGTG** CGGATATAGTCGACCTAGTGCATCCTCGTGGCATCATGCGTCTCCTCAGTAGGTCTG **CGACTGATCCTAGTGCAATGCGTCTGAGCCTGAGCTACAGCGATATAGCCTGGATTG TGAGCGTATTTGCTGTCAGAACCTCAGCTCATCATGTATGATGCTGTACCATCCTGC GATACTGAAGATGCACCGCTATAATGCGAGGCTCTCCGCTAAAGTGGAAGCTGCTC** GTTCTCAATGCGAGCGAGTCGAATTCAATGCCGTAGCTGCGATAACGATGCCGCTGA **CTCTACGGTAATGCACGATCCTCTACATTGATAGCAGATAGTCTAACGGGATAGCAT** AGGTGCAAGGCTCCTAGCATGTAGTCACAGGTGCTCAGATATAGTCATCGCTGCAAT CAGCTAGTCATCTTGTCAGGATGCTACTCACTGCGTGCAGAAGATTCGCACGACTTC AGAGGATGGCACTCGTCATTAGAGTGATGTTCTCGGATCGACACTGCTGGTCTGCGA **ATGACTCGCATTCACTAACATGGAGCATCGTTATCTAAAAGGGGATGCACGTTATCGT** CGAGTGGCCGTCATGTCTATGCAGTGCGGCCTATGTCTCATTAGCGAGTCGTATGTA TCATGTCGGGCTCGAATGTTGCACACGTCTGCGTAATGGTGACCGCTAGTCCCACAT GGTGCTTCGTAGCCACAAATGTCGTTAGGTAGACCGACGTTATCGCGCTATACCCGA` TGTCAACGCGAGTTAGACCGTATCGTCCCCAGTGCCCTAAGATGGTCAAGCGTGCTC <u>CTACGTTAGTATCAGTTTCCCTATTGGTACGTCTGGCGTACTTCTGAAACGTGATGGG</u> CGGCTGGTTACCCGTATATGGGCTCGGTTGACCTCTATTGGGCGTTGTTGACCCgaatte eggaaaaaaaaaaaaaaaaaaaaetgeaggegtaeeagettteeetatagtgagtegtatta.

Claim 22 (original): A method of providing a control for an assay, said assay comprising providing labeled nucleic acid and hybridizing said labeled nucleic acid to a nucleic acid array, said method comprising spiking said labeled nucleic acid with labeled Tag gene nucleic acid, wherein said nucleic acid array has probes complementary to said Tag gene.

Claim 23 (original): A method according to claim 22 wherein said nucleic acid is RNA.

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Claim 24 (original): A method according to claim 22 wherein said nucleic acid is DNA.

Claim 25 (currently amended): A method according to claim 22 wherein said Tag gene is selected from the group consisting of Tags A, B, C, D, E, F, G, H, I, J, N, O, Q, Tag IN, Tag IQ and Tag IQ.EX SEQ ID NOs. 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2059, 2060, 2061, 2062, 2063, 2064, 2065 and 2066.

Claim 26 (original): A method of analyzing the expression of one or more genes, said method comprising:

- (a) providing a pool of target nucleic acids comprising RNA transcripts of one or more of said genes, or nucleic acids derived therefrom using said RNA transcripts as templates;
- (b) providing a spike sample comprising RNA transcribed from a Tag gene or Tag nucleic acids derived from said Tag gene RNA using said Tag gene RNA as template;
- (c) hybridizing said pool of target nucleic acids and said spike sample to an array of oligonucleotide probes immobilized on a surface, said array comprising more than 100 different oligonucleotides, at least some of which comprise control probes and at least some of which comprise probes complementary to said Tag gene or said nucleic acid derived from said Tag gene RNA, wherein each

different oligonucleotide is localized in a predetermined region of said surface, the density of said different oligonucleotides is greater than about 60 different oligonucleotides per 1 cm², and at least some of said oligonucleotide probes are complementary to said RNA transcripts or said nucleic acids derived therefrom using said RNA transcripts;

- (d) quantifying the hybridization of said nucleic acids to said array, wherein said quantification is proportional to the expression level of said genes; and
 - (e) quantifying the hybrization of said spike sample to said array.

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Claim 27 (currently amended): A method according to claim 26 wherein said Tag gene is selected from the group consisting of Tags A, B, C, D, E, F, G, H, I, J, N, O, Q, Tag IN, Tag IQ and Tag IQ.EX SEQ ID Nos. 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2059, 2060, 2061, 2062, 2063, 2064, 2065 and 2066.

Claim 28 (original): A DNA molecule comprising a Tag gene, said Tag gene comprising at least 5 Tag sequences or their complement.

Claim 29 (original): A DNA molecule according to claim 28 wherein said Tag sequences are selected from Seq. Id. Nos. 1-2050.

Claim 30 (currently amended): A DNA molecule according to claim 29 wherein said Tag gene sequences are selected from the group consisting of Tags A, B, C, D, E, F, G, H, I, J, N, O, Q, Tag IN, Tag IQ and Tag-IQ.EX SEQ ID Nos. 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2069, 2060, 2061, 2062, 2063, 2064, 2065 and 2066.